

# AVIATION

*The Oldest American Aeronautical Magazine*

NOVEMBER 9, 1925

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The Thrill of the Parachute

F. & A. Photos

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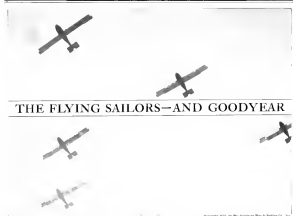
## SPECIAL FEATURES

NUMBER  
19

AIR TRANSPORTATION FACTS  
THE MERCURY JR. COMMERCIAL PLANE  
MORE DISCUSSION ON BOMBING ACCURACY

GARDNER PUBLISHING CO., Inc.  
HIGHLAND, N. Y.  
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under Act of March 3, 1879.



## THE FLYING SAILORS—AND GOODYEAR

ANY flying sailor—in gold braid or blue jacket—will tell you that aircraft are ready for wide adaptation to the needs of commerce.

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And they know, too, what Goodyear

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Everywhere the Navy flies, you will find Goodyear aviation equipment. Goodyear makes everything in rubber for airplanes, airships and balloons of every size and type. Write Goodyear, Akron, Ohio, for any information you want.

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# GOODYEAR

AVIATION EQUIPMENT

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*Curtiss*



CURTIS FULTON, KNOX, 1921

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Your horse of today represents years spent in bringing out the thoroughbred strain.

You may not want an "Abdull" for the simple reason of every day. But you surely profit by every particle of speed, courage, and bone, developed in the training stable and on the track.

Most of you do not want to be shot through the air in a Pulitzer entry at custom ball speed, but right at this moment the air service has been developed in the point where your letters which go by air after and three times faster than if they went by the regular registered mail.

Since 1908, when Oliver Curtiss won the Scientific American Trophy for the first generally announced public flight ever achieved in the United States, in each department of aviation to which attention has been devoted, the Curtiss organization has surpassed all competition.

These tests have made possible the finest fighting planes in the world. They have not only produced in Curtiss motors the greatest power and strength for weight, but they mark the greatest advances in aeronautical engineering, whether it be the speedwing, the wing radiator, the metal propeller, or the host of minor improvements, all outstanding examples of Curtiss creative activity.

The net result is a commercial plane of thoroughbred strain, low selling price, and high performance.

America stands today on the very threshold of commercial flying. Your business letter of unlimited length, sent this afternoon, can be delivered in Chicago by air and before breakfast tomorrow, for less than you can send a fifty word night message. Curtiss now offers two commercial machines—The Clavier Pigeon, selected by the National Air Transport for its trunk lines—the Lark, a smaller machine suitable for feeder lines and other commercial uses.

With these models as a nucleus, the Curtiss organization will do for commercial aviation what it has already done for National Defense.

CURTISS AEROPLANE & MOTOR COMPANY, INC.  
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Its location is in the center of the finest manufacturing district of New England which will provide the skilled labor so requisite for the exacting requirements of this work.

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Dependable Engines

THE  
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ON AIRWAYS MAPS

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NOVEMBER 9, 1925

## AVIATION

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## AIRCRAFT MAGNETO

Contractors to U. S. Navy

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## WRIGHT-BELLANCA SIX SEATER

Powered With  
**WRIGHT WHIRLWIND 200 H.P. AIR COOLED ENGINE**  
235 M.P.H. With 1000 Lbs. Pay Load  
Witness of  
**EFFICIENCY RACE, NEW YORK AIR RACES, 1925**  
Scoring 50% More Points Than Next Competitor

### Wright-Bellanca Planes

With six heavy passengers this 200 H.P. plane makes 138 miles per hour. Its low resistance not only saves speed but also economy and durability. Slow down the engine until it develops only 115 H.P. (55% of its full power) and the plane still has 100 m.p.h. For safety, dependability and economy consider the advantages of a 100 mile per hour cruising speed with 6 passengers (1000 lbs. pay load) and using only 115 H.P. with a reserve of 85 H.P. (over 70% reserve) normally available. The fuel mileage averages 5 m.p.g. at 100 m.p.h. with 6 passengers. The plane is ruggedly built, weighs 1790 lbs. empty and has high factors of safety throughout. It has good vision, low landing speed, quick take off and good climb. Winner of the Efficiency Race at the New York Air Races 1925 with a score of 50% points, more than 50% higher than the next competitor. For detailed information and complete specifications of the Wright-Bellanca Plane write for Bulletin No. 14.

Order for Wright Bellanca planes are being taken now for delivery in the spring. The price complete with 200-horsepower engine is \$25,000.00. For Bulletin No. 14.



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VOL. XIX

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No. 19

### An Air Force—A Political Issue

ONLY those who take a narrow view of the aviation movement and its role in the development of the nation as a political issue. That the country has lost confidence in the present organization and management of our military and naval establishments is evident from the editorials in this journal, the opinion of many prominent business and political leaders is shown, and hardly from the "Maze in the Midwest." It is not too much to say that the whole structure of national defense has been shaken to its foundation.

Heretofore, the Army and Navy have had well defined missions. The country has gladly given its wholehearted endorsement to its military and naval leaders. Appropriations have not been all that were desired but have been large in recent years. But, gradually, air power has altered the strength of the older arms until now the people are bewildered and question the ability of some of their older safeguards.

With public opinion uncertain, leadership becomes essential. If President Coolidge across the helm and across a new course, the country will become satisfied. But a successful handling of the whole problem of National Defense will inevitably throw it into the political arena. It must be remembered that there are few real political issues that are beyond public opinion. How is it that this every subject of controversy? This danger then should make these changes with freedom of government air policy seek to avoid making it a political football.

### The Loss of the Navy's Seaplanes

THE WHIRLWIND out of a seaplane and a half of our most modern naval three purpose type seaplane is a disaster of such magnitude that it should be most carefully investigated and the causes ascertained. The Navy has suffered from a series of disasters that cause sympathy, but in the accident which took place at Bellanca will probably be used as an argument to show the futility and unsatisfactory of aviation, the matter should be passed over in silence even though it may seem somewhat like letting a man when he is down.

A tiny little girl coming from an unexpected quarter may well be considered as "An Act of God" and the disaster caused is absolutely unavoidable. The storm was entirely of extraordinary violence and caused damage to property and loss of life throughout the country, but it cannot be admitted that such a storm will necessarily wreck any sort of seaplane that happens to be anchored in its path. Indeed, the fact of the accident flying boats were moved out of Bellanca during the storm. One-out of the first broke loose from its moorings but was saved by the skillful action of its crew before serious damage was sustained.

Among commercial pilots it is generally agreed that if a plane breaks loose while on the ground that the pilot is responsible for the accident. A plane properly moored will not break loose, but the proper mooring requires both experience and proper mooring gear. The Auto Motors Airways lost two PB's during its first few months of operation due to their breaking loose from moorings. During the next few years it operates but one was damaged from this cause.

There are several essential problems in the mooring of seaplanes, such as allowing sufficient slack in ground cables to permit jacking; protection, to keep the ropes from chafing through, since those of have been long known to maintain safety are peculiar to aircraft, but once these are understood there is no more reason for a seaplane dragging its anchor or parting its moorings than there is for a fast long drive ashore by a violent bias.

Learning by experience is a better method, and our sympathy goes out to the naval air service in their loss of so much modern equipment, but it is hoped that it will not be assumed from the mishap that aircraft will necessarily break loose during a strong wind.

### The Mitchell Trial

FOR THE first time since the war, it seems probable that the best informed aeronautical experts and government officials will be put under cross-examination by well informed questioners who seek to bring out the underlying facts of American aviation.

Heretofore, the hearings have been before boards or committees composed of members whose aeronautical information was gained largely from what they heard at the inquiry. With one or two exceptions, all the questioning was done by one unopposed, with even the most rudimentary facts of aeronautics. With ex-Gov. Mitchell fighting for his reputation and his career, there will be no tendency to let witnesses tell what they want to say and avoid giving information about the subjects that are controversial. The true situation regarding our air strength is now likely to be given to the public.

### Every Week's News

FOR THE past few months there has been such a volume of aviation news that it has not been possible for AVIATION, even though a weekly, to publish a full-sized part of what has been said or done. It has had to be content with giving the fact results of many of the happenings with an interpretation of the best on American aviation. With accidents, trials, hearings, races, and the visits of foreign aeronautical visitors, the semi-weekly news has been enough to fill a daily publication instead of a weekly.



# The Organization of the French Air Services

Technical Development and Procurement for Army and Navy Administered by Separate Department.

IN France there are three departments which are connected with the handling of aeronautical affairs, the Ministry of War, the Navy Department and the Veterans Department but actually there is a fourth department, that of Public Works which has so much to do with the management and problems of aeronautical matters that it might be considered as a partial development of a separate department. In January, 1934, M. Pierre-Etienne Flandin, now appointed Under Secretary of Aeronautics and Aviation, Transportation, a post which had been created as a branch of the Department of Public Works. This Under Secretary is responsible for technical development and the procurement of aircraft for the army, navy, the colonial department and the civilian air transport fleet. He also has under his control all government organizations with civil aircraft transportation character and the branch of the aeronautical department which concerns aeronautics. He does not control the army and navy air personnel nor the development of air tactics, but his office functions are so important that he holds a predominant and controlling influence in French aeronautics.

## The Aeronautics Secretariat

The secretariat of the Under Secretary for Aeronautics is divided into four principal branches. One has to do with technical development and experimentation, another is concerned with manufacturing and production, while a third has to do, broadly speaking, with storage and landing fields and the arrangements of the government with the private companies. Lastly, there is the department of airway.

The Service Technique is itself divided up into two parts, one for research—Service des Etudes—and the other for testing—Service de l'Essai. The director of this technical branch also coordinates the theoretical research and its practical application. The research department is divided up into numerous sections dealing with airplanes, flying boats, hydro-aeroplanes, dirigibles, dirigibles, dirigibles, dirigibles and special airplanes such as reconnaissance, night, etc. The testing branch has a research section and a laboratory section which controls the scientific experiments of the Service de l'Essai. The Service de l'Essai is divided into two parts, one for the army and the other for the navy.



The Transport 28C Potez Plane of the French Air Service

Colon-Vladimir. Also a testing section with its field at Villacoublay, and its technical section and, finally, a research section, under under the branch.

## The Production Branch

The manufacturing and production branch—Service des Fabrications de l'Aeronautique—arranges for the civilian manufacturers to furnish only in certain cases, repair of the material used by the government, with no planes, flying boats, float airplanes, hydroplanes, balloons, engines, engines, new materials, metals, rubbers, etc. This branch covers up the elements for production orders but not for experimental work and, more for the material. It supervises the quality of the work done in the factories, it accepts the material and controls the flying tests of the finished planes and sees to packing and shipping where this is necessary. Lastly, it is charged with looking out a scheme for the rapid development of manufacturing facilities in case of war, provision being made for factories to take care of such special work. It is further charged with the keeping of the blue prints models, etc., which are used in production.

## Civil Aviation Department

The third great branch is that concerned with airways—Service de la Navigation Aeronautique. This branch plans, figures out the most aerial airways, does the necessary reconnaissance work, keeps and arranges the landing fields, builds for longways and creates the radio stations, etc. It makes and follows up the contracts with the transport companies, arranges the schedules, guarantees the technical services to the pilots and guards pilot licenses of various classes. All the services in France, Greece and Southern Africa, as well as the colonies, come under this airways department.

The fourth branch is that concerned with meteorology—Service National de Meteorologie which, in the field, informs, guides and gives out information about the weather.

The personnel of the main bureau of the Under Secretary for Aeronautics and the four associated branches, are made up of civilians personnel, as well as of military personnel, detached from the army or the navy. A law of March, 1935,

authorizing the creation of a corps of civilian engineers attached to the aeronautical branch has been recently fulfilled. The principal civilian technical staff are now "Ingénieurs de l'Aeronautique." There are also a certain number of civilian specialists which function automatically in technical, medical and meteorological sections.

## Military Aeronautics

In the war department, most of the operations involving an Aeronautics are handled by the XII Bureau—"XII Direction." The various bureaus or sections of the war department is administered as far as its internal management and the administration of the personnel is concerned, and is separated from the other branches of the service. However, the general staff of the war department is in charge of the technical use of the air forces, of the weapons and tactics of aeronautical units and of the flying, each year, of the new personnel to be assigned to aviation. The Quarter Master Corps handles barracks, the Postal Service handles mail and all the other services, favorable special laws, books, documents and standard ground transportation material, etc. As has been stated before, aeronautical material, flying component and special aeronautical equipment is purchased by the Under Secretary of State for Aeronautics, according to the decisions and requirements of the "haute direction," the "XII Direction," for example.

The "XII Direction" is thus practically concerned with organization, instruction and mobilization. It creates questions of reserves, personnel, general organization and information. There is a section for reserve-flying air, a section for the budget and for statistics and a fourth section, which deals with effective personnel.

## Inspection Department

The bureau of general inspection of military aeronautics—Inspection générale de l'Aeronautique Militaire—created in 1923, functions independently of the "XII Direction." Its purpose is to inform the ministry and the general staff of the development of aviation, to ensure a unity of policy among all the troops and to study special problems.

There are several sections, which come under the control of the "XII Direction."

(a) A technical section for the inspection of military aeronautical material—Inspection Technique de l'Aeronautique—whose direction is to control, from the technical point of view, the establishments and functions of military aeronautics, verifying the quality of material, ensuring technical inspection coming from the various establishments and following the development of new devices as special law. This section is in very contact and close touch with the technical branch, which comes under the Under Secretary for Aeronautics.

(b) A supply section—Service Generale du Matériel—

which coordinates the various warehouses and effects the storage and distribution of aeronautical material.

(c) A control section—Service Control de l'Aeronautique Militaire—

(d) A technical section—"Service." There is only one primary transportation for military pilots, namely that of the army. Due to the difficulty of training pilots during the period of their obligatory service, the war department controls the primary training in aviation schools where the training is done before the recruits have done their obligatory service. At Sevran there is a school for aviators, pilots, etc., while the highest-level section is at Orléans and the air school at Montargis.

(e) The Meteorological Section is charged with that of the National Meteorological Service.

(f) A central advanced school of aeronautics for officers located at Versailles.

## Military Groups

There are two principal regiments, the day and two night bombardment regiments and four observation regiments and the following types of planes are used:

Personnel types, Nordwest 28 and Nord 31, both with 300 hp. Hispano-Suiza engine. Bombardment types, Nord 31 32 with 300 hp. Nord 31 33 with 400 hp. Nord 31 34 with 400 hp. Nord 31 35 with 400 hp. Nord 31 36 with 400 hp. Nord 31 37 with 400 hp. Nord 31 38 with 400 hp. Nord 31 39 with 400 hp. Nord 31 40 with 400 hp. Nord 31 41 with 400 hp. Nord 31 42 with 400 hp. Nord 31 43 with 400 hp. Nord 31 44 with 400 hp. Nord 31 45 with 400 hp. Nord 31 46 with 400 hp. Nord 31 47 with 400 hp. Nord 31 48 with 400 hp. Nord 31 49 with 400 hp. Nord 31 50 with 400 hp. Nord 31 51 with 400 hp. Nord 31 52 with 400 hp. Nord 31 53 with 400 hp. Nord 31 54 with 400 hp. Nord 31 55 with 400 hp. Nord 31 56 with 400 hp. Nord 31 57 with 400 hp. Nord 31 58 with 400 hp. Nord 31 59 with 400 hp. Nord 31 60 with 400 hp. Nord 31 61 with 400 hp. Nord 31 62 with 400 hp. Nord 31 63 with 400 hp. Nord 31 64 with 400 hp. Nord 31 65 with 400 hp. Nord 31 66 with 400 hp. Nord 31 67 with 400 hp. Nord 31 68 with 400 hp. 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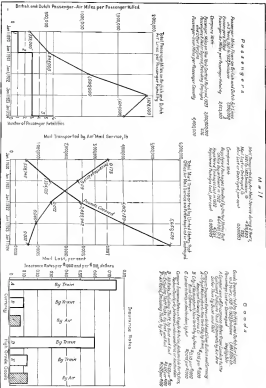
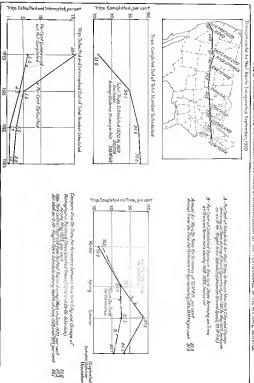


FIG. 3—IMPACT RELATIONS THE SAFETY OF PASSENGERS, MAIL, AND GOODS CARRIED BY TYPICAL AIR TRANSPORTATION SERVICES



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**FIG. 4—EVIDENCE RELATING TO THE FEASIBILITY OF A 20-TO-30-SECOND ASSESSMENT BY THE PERFORMANCE OF THE AIR MAIL SERVICE**







is not heretofore known. It is rumored that he has been visiting his favorite uncle in one back. But it is a fact that he is in the city.

#### Forbes's Flying Salesman

A BIRMINGHAM flying salesman, who has been visiting his favorite uncle in one back. But it is a fact that he is in the city.



Mr. W. C. Brown, the flying salesman, said on the 1924 flight plane that he had been in the city.

via, the latter Tulsa division manager. The end of his active career, however, was not the end of Mr. Brown's flying. He bought a K-6 Standard and determined to do flying for a living. Since he has been interested in aviation for some time, he has been flying for some time.

Because of the international conditions since Oklahoma, Kansas and adjacent states, it was early decided to use the plane for business. Great distances and poor train schedules were a great hindrance to the Tulsa office. All-day trips were made for a few hours and, instead of the Manager being kept out of the office for two days, where he has to be needed, he has been in the office for two days. He has been in the office for two days, where he has to be needed, he has been in the office for two days. He has been in the office for two days, where he has to be needed, he has been in the office for two days.

Mr. Brown does not make anything but dignified entrances or exits. He has been seen to enter from the rear of his car in a flying suit and to exit from the rear of his car in a flying suit. He has been seen to enter from the rear of his car in a flying suit and to exit from the rear of his car in a flying suit. He has been seen to enter from the rear of his car in a flying suit and to exit from the rear of his car in a flying suit.

From a commercial standpoint, this flying salesman has proved itself profitable. There is no loss in time, everything goes on, and from the air, he can see a place, everything goes on, and from the air, he can see a place, everything goes on, and from the air, he can see a place.

#### Rodger's Flight

The group of flying boats now commonly known as "Rodger's Fleet" were put in their appearance at Balboa last year. The "fleet" was an unusual attraction from the North to the South and this is probably the largest group of aircraft

which has made the flight from New York to Florida and proven that the flying boat is not extinct along our Eastern coast.

These Rodgers, who has been operating "fleet" for many years, in the "fleet" of the fleet. George Cobb, Eddie Stinson, George Hamilton and Bill Jones are flying the "fleet" planes. The passengers on the "fleet" are: R. Lee, Donald Lee, H. Stafford, W. Adams, Mr. White and Mr. Lee, who are flying the "fleet" planes.

George Cobb, who joined the fleet this season, was formerly with the American Airlines but turned to flying boats because of the international conditions. He is now in the flying boat business.

The fleet now has four planes, two of which are flying the "fleet" planes. The fleet now has four planes, two of which are flying the "fleet" planes. The fleet now has four planes, two of which are flying the "fleet" planes. The fleet now has four planes, two of which are flying the "fleet" planes.

#### The Stirling Expedition to New Guinea

The first American expedition to visit the unexplored white of New Guinea, left New York's Chamberland, 1914, from New York, N. Y., Tuesday, October 28, 1925, at 10:30 p. m., flying in a Vought triplane for San Francisco, where they will meet the leader, Mr. J. B. Stirling, who, for years, has been in the service of the Department of Commerce, and who is now in the service of the Department of Commerce.

The United States government was first notified by the Secretary of Commerce to enter but this was greeted with an emphatic "NO." but, after much persuasion, the expedition was finally permitted but was told that there would be no protection and no responsibility for the safety of the expedition. The expedition was finally permitted but was told that there would be no protection and no responsibility for the safety of the expedition.

The Vought triplane is fully equipped with a trimotor engine, radio, self-starter and a motor for the propeller. The Vought triplane is fully equipped with a trimotor engine, radio, self-starter and a motor for the propeller.

In addition to Mr. Stirling, who has been in the service of the Department of Commerce, and who is now in the service of the Department of Commerce, the expedition party consists of Mr. R. P. Cook, St. Petersburg, Fla., pilot; Mr.

Stirling, A. H. Helling, Chicago, Ill.; Stirling, H. H. Helling, Chicago, Ill.; Stirling, H. H. Helling, Chicago, Ill.; Stirling, H. H. Helling, Chicago, Ill.; Stirling, H. H. Helling, Chicago, Ill.

According to the plan announced when the plane flew off, the expedition will leave San Francisco and fly to Borneo, Java, and ship the airplane. The expedition will leave San Francisco and fly to Borneo, Java, and ship the airplane.

Dutch New Guinea is one of the largest islands in the world. It is approximately 120 miles long and from 300 to 500 miles wide. One half of the island is owned by the Netherlands Government and one half by the British Government.

The plane has a gasoline capacity of 500 gallons, enough for the flight of flying at 100 miles an hour. The plane has a gasoline capacity of 500 gallons, enough for the flight of flying at 100 miles an hour.

#### Emergency Landing Field Near Anacostia

The commanding officer of the United States Naval Air Station, Anacostia, D. C., has been notified by the Department of Commerce, and who is now in the service of the Department of Commerce, the expedition was finally permitted but was told that there would be no protection and no responsibility for the safety of the expedition.



THE REASON FOR THE

30,000 Radiators in working

Établissements LAMBLIN, 36, Bd Bourdon, NEUILLY-SUR-SEINE (France)

## Loening Aeronautical Engineering Corporation

31st Street and East River, New York City

ORIGINATORS OF AIRPLANES OF ADVANCED DESIGN

Contractors to:

As Service, U. S. Army; Bureau of Aeronautics, U. S. Navy; Air Mail Service, U. S. Post Office Department

Plan Flying to Advertisers, Please Mention AVIATION

Pussy Point and Higgins Point. The field is divided down the center by a road, the road built long to the southeast. There is a large and telephone at the north end of the field and trees at the south end. The field is about 10 ft. above the water, covered with grass, has excellent drainage, and is safe for landing any number of the year. Prevailing winds are up and down the field. Approx. position: 36° 12' 30" N, 76° 32' 15" W.

#### New Airplane Engine

An engine without expensive pipes, exhaust, etc., or high engine loads, has been constructed and will shortly be tested in the air. Successful ground tests have been made already.

The engine is the result of extensive experiments at the Royal Aircraft Establishment, Farnborough, England, with a system of compressing oxygen. A special apparatus injects heavy oil into the cylinder at the correct moment. The oil, oxygen, and is subjected to such an intense pressure that it ignites automatically.

The engine is so complicated that the ordinary airplane engine, and it promises a marked reduction in aircraft engine costs.

#### The Lawson Aircraft Company

According to report the Lawson Aircraft Company of New York has leased the factory located at Brookline Street and North Avenue, formerly owned by the Standard Aero Company, and after extensive work in the manufacture of aircraft for the United States and foreign Governments as well as the commercial air lines and private individuals. Alfred W. Lawson is the chief designer. The location of an airport on a terrace will be divided open soon. The Standard Aero Company used the plant during the World War.

High, Speed, Load  
**RADIATORS LAMBLIN**  
WATER AND OIL

Have the World's Records

Établissements LAMBLIN, 36, Bd Bourdon, NEUILLY-SUR-SEINE (France)

## UNITED STATES AIR FORCES

### U. S. ARMY AIR SERVICE

#### Fort Leavenworth Students View Aerial Demonstration

The annual demonstration flight left Kelly Field, Texas, September 25th for Fort Leavenworth, led by Major Cyril H. Wain and Captain A. B. McDonald. This flight, which has become an annual effort, is for the purpose of demonstrating to the students of the Command and General Staff schools at Fort Leavenworth some of the technical possibilities of an Air Service and its use. This demonstration will be repeated this year for the first time at the Military School at Fort Riley. The flight consisted of six Headquarters and Staff planes, six pursuit, six bombardment, one observation and one attack plane. An explanation of the latest representation of observation services in the first division and personnel for the demonstration of these developments in aerial photography and communication will be sent from Chicago and McCook Fields to join the expedition at Fort Leavenworth. Upon the completion of their work at Fort Leavenworth and Fort Riley, many of the pilots and all of the 3rd Attack Group, assigned to the Air School at Mitchell Field and participated in the Air Force Demonstration held there immediately following the term.

#### Kelly Field Pilots Fly to Pacific Coast

A flight of four airplanes from Kelly Field, piloted by Captain R. S. Wright, 1st Lieut. John F. Hobbs, 2nd Lieut.

J. S. Griffith and 1st Tech. Troop recently completed a successful trip to the Pacific Coast and up through San Francisco, Cal., Portland, and Portland, Ore., and Spokane, Wash., and participated in a series of exhibitions sponsored by the Commanding General of the 9th Corps Area. The personnel report a successful trip and splendid hospitality at all stops.

#### Shipments by Air From Middletown Air Intermediate-Route Depot

A total of 2960 lbs. of miscellaneous spare parts and supplies were shipped by air from the Middletown Air Intermediate Depot during the month of July, August and September. Of this total, 2600 lbs. were shipped to Morris Barracks in five trips, the loads comprising 625, 285, 265, 550 and 520 lb., respectively, thus demonstrating the ability of the Morris Barracks in the matter of transporting supplies. Of the remaining 260 lb. of supplies, 200 were stored in Dillfield.

#### Night Flying in the Philippine Islands

Night flying among Dillfield and Morris Barracks, was the outcome of the air work recently performed by the 25th Squadron. Squadron stationed at Camp Nimitz, East, P. H. 1st Lieut. Delmar H. Benton, A. A. Knicker, and P. H. 1st Tech. were in command of the mission. The flight was held to instruct in checking of the various pilots and to night navigation and tactical maneuvers. This work was carried out with the new landing light equipment, flight light sets being installed only for use in case of failure of the flying

equipment. The various findings were apparently as good as those made in daylight. The night findings in Dillfield were slightly more difficult, but no trouble has yet been experienced. Leads: Myers, Moore, O'Donnell, Geron, and Beverly called on Morris while Captains Benton, Knicker, Lamb, Harper, Powers and Leaden flew Dillfield at night.

#### Army Air Orders

1st Lieut. E. G. Harper, A. S., upon completion of tour of duty, to Kelly Field.

1st Lieut. E. G. Harper, A. S., Kelly Field, to San Francisco, arriving Jan. 27 for Philippine Sea.

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## Swallow

The Aristocrat  
of the Air

### ANNOUNCING

A NEW DEALERS AGENCY CONTRACT  
For Closed Territory

Write to Wire for Details of Sales Plan and List of Open Territory

The only OX3 motorized airplane to finish the Ford Reliability Tour with a 100% perfect score

### Swallow Aeroplane Mfg. Company

WICHITA, KANSAS

### CLOSING OUT

#### ACT QUICK

New Janes with new OX3 motor only 1 hour first \$1400.00 gets it. Janes completely rebuilt last spring just refinished in silver, 15 gal. motor tank. A real bargain at \$1000.00. Janes came to show, with exception of tank, which is Duce. This one must be seen and flown to be appreciated. Only \$1000.00. A money maker three places Janes taken off and sent with 2 passengers and plus the same as ordinary Janes class on sale. The price is \$971.00.

Get your order in on any of the above within 10 days and I will fly it to you. Complete flying instruction \$100.00 to purchasers of plane only.

1 150 H.P. new copper to Hossy prop \$15.00 1 150 copper prop slightly used Hossy prop \$10.00 1 150 new copper prop slightly used Hossy prop \$15.00 1 Standard rubber, good condition \$15.00 2 26 x 2 wheels with 2 passengers and plus the same as ordinary Janes class on sale. The price is \$971.00.

OX3 motor completely overhauled with new valve stem \$224.00 1 150 H.P. motor, good as new \$600.00 1 4 web order, balance C.O.D.

J. H. Burt Box 252 Y.M.C.A. Dayton, Ohio

## "KEY" YOUR ADVERTISEMENTS

IN  
AVIATION  
AND OTHER PUBLICATIONS

### If you want the final word on Advertising Returns and Costs

This is the advice of one of the largest dealers in aircraft parts and supplies, who understands advertising and uses it consistently to expand his business. In a letter of September 28, to AVIATION, this advertiser (name upon request), after telling how, by the key system, he has proven the exceptional advantages of AVIATION advertising, continues as follows:

"Regardless of how much is spent with you or others, the cost per inquiry is substantially lower in AVIATION than in any other paper.

"Every paper in the field claims to give the lowest cost per inquiry, which is only *say*, but I KNOW, I have proven it over a long period."

### Reduce Claims to Facts by "KEYING" YOUR ADS.



100% Coverage of the Flying Field

When Writing to Advertisers, Please Mention AVIATION

The Cox-Kline SA 1 type machine, the type used in the machine used, has no exhibition recently at Alaska, Alaska, Alaska. There are only two places in the type now in operation, the other one being at Dayton, Ohio. Capt. Andrew W. Smith, Flight Surgeon, Air Service, located the plane over at Alaska, Flight from Fresno Field, under the command of Major McQuinn, Fresno, Alaska, St. E. B. Walker J. Gifford and Private E. V. Voss.

When Writing to Advertisers, Please Mention AVIATION

## At Your Service

Aero Supply Mfg., Co.  
Inc.Manufacturers and Distributors  
of  
Airplane Accessories  
and Supplies

Call on us for anything. We'll help you

College Point, Long Island, New York

## DOPES

PIGMENTED  
VARNISHESDOPES  
ENAMELS

## TITANINE

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TITANINE, Inc.  
UNION, UNION COMPANY, N. J.

Contractors to U. S. Government

## THE EAGLEBOOK

\$2.475 on 60-60—Down

Watch for our new feature in the Eaglebook which will be sent as the new feature.

We are offering a new

LANSING PLANE

Manufactured with a Cyl. engine. Motor for \$125.00 as sold as better value to price sold. This ship weighs only 550 lbs. (including a 100 lb. oil tank).

Division of Alexander Industries  
Route 10, Alexander Industries Bldg.  
DENVER, COLORADO

A group of spectators showed interest in the conclusion of a flight which Captain Will Greenwald, 1st Lt. William Precede, Capt. of the State Trench Hospital and Dr. Augustus B. Boyd, Chief of the Clinic, were among those who examined the plane and passed its facilities for carrying patients in the event of accident. The plane was then taken to the clinic and placed inside into the hot white plane and, without having to crack it by forcing the propeller, started it off as any motor on an automobile, stopping on the accelerator. With the three passengers aboard he left Elmhurst Field and 25 minutes later landed at Princeton Field.

The plane had a speed of 150 m.p.h. while carrying two patients and an attendant, in addition to the pilot. It is equipped with lateral facilities for turning far and around the neck and secured. This is the first time that an ambulance has been equipped in the form of the Coast Guard, though it has long been felt that some means of ambulance emergency was urgently needed, in during the past few years, many urgent emergency demands have been made upon the authorities at Princeton Field to rush patients to some remote place in the Republic of France for purposes of administration of first aid or emergency persons on point of death to the Ames Hospital where, in many cases, the patient arrived just in time.

## U. S. NAVAL AVIATION

## A Recent Flight of the TC-4

The Airship TC-4 made a special cross-country flight to Elizabeth City, N.C., for the purpose of participating in a cross-country race in the company of the new land plane through North Carolina, leaving Langley Field at 11:30 a.m., the flight was made to Elizabeth City in one hour. The ship stood by at low altitude until 1:00 p.m., when it crossed the city and went forward, giving passengers the ground an opportunity to see it, 1,000 yds. when it landed toward Langley Field, arriving at the hangar at 3:00 o'clock. The crew were: Capt. W. J. Reed, pilot; Capt. Charles F. Clark and 1st Lieut. W. J. Reed, pilot; Capt. Charles F. Clark and 1st Lieut. W. J. Reed, pilot; Capt. Charles F. Clark and 1st Lieut. W. J. Reed, pilot; Capt. Charles F. Clark and 1st Lieut. W. J. Reed, pilot.

On Oct. 28th Capt. T. A. Baldwin with Lieut. E. Edwards took the TC-4 for routine training flights. Weather in the morning was good for flying, with a weak wind of not more than 10 m.p.h., but about 11:30 a.m. a strong wind began to blow up and the situation became rather serious. The TC-4 was brought to the ground and a good landing was made in spite of the wind. Every available man on the company was called out and, after a short struggle in a series of 30 m.p.h., the ship was taken into the hangar. The only damage sustained in the half hour fight with the storm was the loss of a piston.

## Navy Airman Have Crash Elevator

The Pensacola Naval Air Station football team, which will play the Penn State team on November 25, has a crash elevator. The elevator is the Station team of last year, used for relieving a 14-13 defeat on the Ft. Benning Football Field.

The team this year has a number of former Naval Academy players, including "Reddy" Cruise, who received All-American honors three times, and Hauldane. Among the possible players are King, who plays tackle, and Hauldane, a three-time athlete at the Station, having won awards in football, basketball and football.

The coaches this year are Lt. Cmdr. A. D. Douglas, acting in an advisory capacity, Lt. H. H. Horton, assistant field coach, and Lt. Col. L. H. L. Horton, assistant field coach. L. H. Horton is said to be making ship's team.

## Navy Air Orders

Lt. [?] Warren K. Berron del. Air Force, Seattle, Wash., to U.S. Navy.

Lt. [?] Howard L. Jennings del. Air Force, Seattle, Wash., to U.S. Navy.

Lt. [?] Herbert W. Taylor del. Air Force, Seattle, Wash., to U.S. Navy.

Ensign [?] [?] del. Nav. A. Sta., Pensacola, Fla., to U.S. Navy.

Lt. [?] John F. Womble del. Nav. A. Sta., Pensacola, Fla., to U.S. Navy.

Lt. [?] [?] del. Nav. A. Sta., Pensacola, Fla., to U.S. Navy.

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## PUBLISHER'S NEWS LETTER

In referring to the annual election of the N.A.A., a note suggested that probably neither General Patrick's nor General MacDill's ideas would receive much support from the air officials whose training was so predominantly naval. The following letter from Godfrey L. Cabot, President of the N.A.A., puts the proposition in a new light as it affects to make "America first in the air" as a condition of the N.A.A. will not take into account the military aviation. We have asked General Clarence R. Edwards, as suggested by President Cabot to send us his views on a Department of Defense. Gen. Edwards, it will be remembered, has recently been interested in procuring an airplane company in Boston. Mr. Cabot's letter follows:

"Referring to your very interesting News Letter on page 567 of your issue of October 19, I beg to say that to the best of my knowledge and belief the National Aeronautics Association has never expressed any measure nor favored by General Patrick. General Patrick is a very strong advocate of a Department of National Defense, but he does not consider the control of civil aeronautics essential to this plan.

"The National Aeronautics Association is not connected either by actual tie association, and in my judgment it is very unlikely to take sides as it is the near future for the reason that the nation is essentially military and involves immense complications of military administration, as to which our Government acts as general set experts.

"Personally, I must admit that the proposition seems inherently logical and reasonable, but involves a colossal task. Can you not induce General Clarence R. Edwards to discuss it in your columns? He was strongly urging such a department sometime like ten years ago and I suppose is still in favor of it, and I feel sure that a discussion of a man of such ability and command of English would be of great interest to your readers and myself among the number."

\*\*\*\*\*  
 We have received from Major Louis MacDill of McCook Field, a letter in which he states that he has "taken the trouble to clip pertinent passages and include them in your reference. It is awfully hard to be consistent, is it not?" The enclosure is a partial column underlined account of the Liberty Engine Builder's Race and the MacDill Trophy race appearing in Aviation after the Pulitzer Race. And the last part of the success in that Major MacDill is undoubtedly right. It is hard to be consistent, especially when you are cheered and in the short time to few points to users. There is not much left to make the connection to "Major MacDill" has made the connection to "Where the MacDill's" is "L.D.C."

placed the disappointing time made in the Pulitzer Trophy race as an indication of the time made on previous occasions by 1924-25, and the time made by Douglas this year. So that our technical friends at McCook Field may have their side put in a proper light, it should be stated that at St. Louis when a speed of 119.03 m.p.h. was made in the Liberty Engine Builder's Race three years only ago this morning. Last year at Dayton the course was 100 miles with twelve laps and the speed made by the DHVs was 130.34 m.p.h. This year the course was 100 miles with fifteen laps and the best time made by any American entry was 128.3 m.p.h. It would, therefore, appear that with more time and on a twenty day course at New York was much slower than at the other cities. Another point should also be made in view of the recommendation suggested by Major MacDill. The official speed for the Douglas XO-2, 151 m.p.h., was made on a short straightaway, and therefore our comparison with the 128.3 m.p.h., made in the race was not one that gives a proper parallel. It would appear from the results of the race, that, considering the number of turns of the course and the weather, the Douglas corps observation flight's speed was no better conservatively than that made by other types under the adverse conditions prevailing. We are very glad that Major MacDill brought this matter to our attention and that our readers are given a clearer interpretation of this year's race.

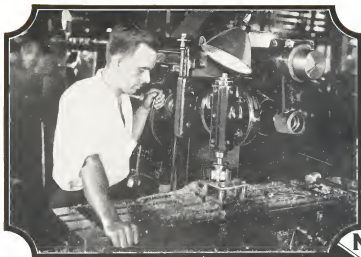
\*\*\*\*\*  
 Next week, Cy Caldwell will continue to engage our readers with his first attempt at an illustrated historical narrative. He has, after much laborious research, prepared a most detailed study of those aeronautical accidents, the Madocks, and suggests who is interested in backgrounds, precedents and forebodings will find in this study, which will always be used for reference purposes, facts, and perhaps fancies, that will be enlightening as well as entertaining.

Cy's "Where the Madocks" takes them from their humble but mysterious origin in the Adirondacks, where they evidently needed no visa to stimulate speech, and traces them down through the ages to the climax of their activity—the present. Whatever may be the opinion of some long-faced historians about a narrative of this nature, AVIATION has tried to be, writing in the history of aviation by little side bits into history, it has been the unanimous opinion of those from whom we have heard that "Cy's" description of the Ford Reliability Tour and his "Steez Through the Bayou" were masterpieces. As the title hands say—"Was for 'Where the Madocks'?"—L.D.C.









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the Master Craftsman  
would be Helpless—*

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